

Brown and Caldwell

Carson City, Nevada

BORING LOG

Project Name: OU4 Phase 1 - Yerington Mine Evaporation Ponds

Project Number: 136742

Soil Boring: ☒

Monitoring Well: ☐

Piezometer: ☐

Boring/Well Name: OU4-UEP-08

Sheet 1 of 2

Boring Location: OU4 Unlined Evaporation Ponds		Northing: 1554102.64	Easting: 323896.37
Drilling Contractor: WDC		Top of PVC Elevation: Ground Surface Elevation: 4374.29 feet amsl	
Drilling Equipment: Geoprobe		Date Started: 10-08-08	Date Finished: 10-08-08
Drilling Method: Direct-Push		Completed Depth: 25 ft bgs	Water Depth: 17 ft bgs
Sampling Method: Continuous Core		Driller: Rick Smedley	
Well Seal: N/A		Borehole Diameter: 2"	
Logged By: P. Bassett		Drilling Fluid: N/A	
		WELL CONSTRUCTION	
		Type and Diameter of Well Casing: N/A	
		Slot Size: N/A	Filter Material: Cement grout

Depth (ft)	Elevation (famsl)	USCS Group Symbol	Material Description	Sample Type I Name	Sample Type I Location	Sample Type II Name	Sample Type II Location	Lithology	Remarks
5	4370	ML	SILT (Pond Sediments) (0 - 1) Yellow, moist.						<p>Description of drilled cuttings based on ASTM Method D-2488 (the visual-manual procedure), grain-size determinations and nomenclature based on the Unified Soil Classification System.</p> <p>Horizontal Survey data is expressed in the Nevada State Plane system, Nevada West zone, in feet.</p> <p>Sharp contacts indicated by solid lines, gradational contacts indicated by dashed line.</p> <p>All depths are below land surface unless stated otherwise.</p> <p>Type 1 Samples are representative of geochemical and geotechnical soil samples as well as groundwater samples.</p> <p>Type 2 Samples are representative of meteoric water mobility soil samples.</p>
		SP	SAND (Native Soil) (1 - 8) Reddish brown, very loose and crumbly. Sand is medium- to coarse-grained and poorly graded. Visible quartz and feldspar phenocrysts derived from rhyolitic, volcanic rock formation. Sample: <u>OU4-UEP-08A-SC</u> from 3-6 feet. Sample: <u>OU4-UEP-08A-SC-FD</u> (Duplicate) from 3-6 feet. Sample: <u>OU4-UEP-08A-MW</u> from 3-15 feet. Composite sample from 3 borings spaced 6 inches apart.	OU4-UEP-08A-SC					
10	4365	SM	Well-graded SAND with silt (8 - 10) Firm, slightly plastic. Sample: <u>OU4-UEP-08A-SG</u> from 8-10 feet.	OU4-UEP-08A-SG					
		SP	SAND (10 - 13) Loose. Sand is medium- to coarse-grained and poorly graded. Sample: <u>OU4-UEP-08B-SC</u> from 10-13 feet. Sample: <u>OU4-UEP-08B-SC-FD</u> from 10-13 feet.	OU4-UEP-08B-SC					
	4360	ML	Sandy SILT (13 - 15) Sample: <u>OU4-UEP-08B-SG</u> from 13-15 feet.	OU4-UEP-08B-SG					

Project Number: 136742Sheet 2 of 2

Depth (ft)	Elevation (famsl)	USCS Group Symbol	Material Description	Sample Type I Name Sample Type I Location	Sample Type II Name Sample Type II Location	Lithology	Remarks
		SM	silty SAND (15 - 17) Firm.				
		SW	SAND (17 - 21) Fine- to medium-grained sand, moderately graded with minor silt (?). Soil becomes saturated at 17 feet. Sample: <u>OQ4-UFP-08-GW</u> from 17-20 feet.				
4355				OQ4-EUP-08-GW			
20							
		CL SW	CLAY (21 - 21.2) Thin, gray-colored, clay seam (approximately 2 inches thick).				
			SAND (21.2 - 25) Fine- to medium-grained sand, moderately graded and tightly packed.				
4350							
25			Bottom of Borehole at 25 feet below ground surface.				
4345							
30							